

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A process for the production of paper which comprises;

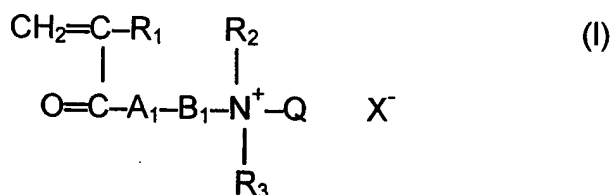
- (i) providing a suspension containing cellulosic fibers, and optional fillers,
- (ii) adding to said suspension a drainage and retention aid comprising at least 0.001% by weight of a cationic organic polymer based on dry stock substance, the cationic organic polymer having an aromatic group;
- (iii) forming and dewatering the obtained suspension on a wire, wherein the suspension that is dewatered on the wire has a conductivity of at least ~~2.0~~ 3.5 mS/cm, ~~and a content of di- and multivalent cations of at least 200 ppm.~~

2. **(Original)** The process of claim 1, wherein the suspension that is dewatered on the wire has a conductivity of at least 5.0 mS/cm.

3. **(Original)** The process of claim 1, wherein the cationic organic polymer is a vinyl addition polymer comprising in polymerized form one or more monomers comprising at least one monomer having an aromatic group.

4. **(Original)** The process of claim 1, wherein the cationic organic polymer is an acrylamide-based polymer.

5. **(Original)** The process of claim 1, wherein the cationic organic polymer comprises in polymerized form a cationic monomer having an aromatic group represented by the general formula (I):



wherein R_1 is H or CH_3 , R_2 and R_3 are each an alkyl group having from 1 to 3 carbon atoms, A_1 is O or NH, B_1 is an alkylene group of from 2 to 4 carbon atoms or a hydroxy propylene group, Q is benzyl, and X^- is an anionic counterion.

6. **(Original)** The process of claim 1, wherein the cationic organic polymer has a weight average molecular weight of at least 1,000,000.
7. **(Original)** The process of claim 1, wherein the cationic organic polymer is prepared from a monomer mixture comprising from 5 to 20 mole% of cationic monomer having an aromatic group and from 95 to 80 mole% of other copolymerizable monomers.
8. **(Original)** The process of claim 1, wherein the drainage and retention aid further comprises anionic inorganic particles.
9. **(Original)** The process of claim 8, wherein the anionic inorganic particles are silica-based particles or bentonite.
10. **(Original)** The process of claim 8, wherein the anionic inorganic particles are aluminium-modified silica-based particles.
11. **(Original)** The process of claim 1, wherein the drainage and retention aid further comprises a low molecular weight cationic organic polymer.
12. **(Original)** The process of claim 8, wherein the drainage and retention aid further comprises a low molecular weight cationic organic polymer.
13. **(Original)** The process of claim 1, wherein the drainage and retention aid further comprises an aluminium compound.
14. **Cancelled.**

15. **(Original)** The process of claim 1, wherein the suspension comprises recycled fibers.

16. **(Previously Presented)** The process of claim 1, further comprising obtaining a wet web of paper and white water from dewatering the suspension on the wire, recirculating white water and introducing fresh water to form a suspension containing cellulosic fibers, and optional fillers, to be dewatered, wherein the amount of fresh water introduced is less than 20 tons per ton of dry paper produced.

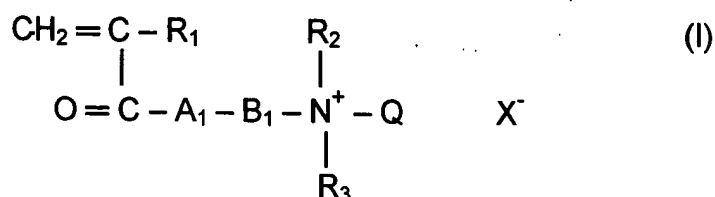
17. **(Original)** The process of claim 16, wherein less than 10 tons of fresh water is introduced per ton of dry paper produced.

18. **(Previously Presented)** A process for the production of paper which comprises:

- (i) providing a suspension containing cellulosic fibers, and optional fillers;
- (ii) adding to said suspension a drainage and retention aid comprising a cationic organic polymer having an aromatic group;
- (iii) forming and dewatering the obtained suspension on a wire to obtain a wet web of paper and white water,
- (iv) recirculating white water and introducing fresh water to form a suspension containing cellulosic fibers, and optional fillers, to be dewatered, wherein the amount of fresh water introduced is less than 30 tons per ton of dry paper produced.

19. **(Original)** The process of claim 18, wherein the cationic organic polymer is an acrylamide-based polymer.

20. **(Original)** The process of claim 18, wherein the cationic organic polymer comprises in polymerized form a cationic monomer having an aromatic group represented by the general formula (I):



wherein R_1 is H or CH_3 , R_2 and R_3 are each an alkyl group having from 1 to 3 carbon atoms, A_1 is O or NH, B_1 is an alkylene group of from 2 to 4 carbon atoms or a hydroxy propylene group, Q is benzyl, and X^- is an anionic counterion.

21. **(Previously Presented)** The process of claim 1, wherein the suspension that is dewatered on the wire has a content of di- and multivalent cations of at least 300 ppm.

22. **(Currently Amended)** A process for the production of paper which comprises;

- (i) providing a suspension containing cellulosic fibres, and optional fillers,
- (ii) adding to said suspension a drainage and retention aid aids comprising a cationic organic polymer having an aromatic group and anionic microparticulate material;
- (iii) forming and dewatering the obtained suspension on a wire, wherein the suspension that is dewatered on the wire has a conductivity of at least 2.0 mS/cm and obtaining a wet web of paper and white water, recirculating white water and introducing fresh water to form a suspension containing cellulosic fibres, and optional fillers, to be dewatered, wherein the amount of fresh water introduced is less than 20 tons per ton of dry paper produced.

23. **(Previously Presented)** The process of claim 22, wherein less than 10 tons of fresh water is introduced per ton of dry paper produced.

24. **(New)** The process of claim 22, wherein the anionic microparticulate material is anionic organic particles.

25. **(New)** The process of claim 22, wherein the anionic microparticulate material is anionic inorganic particles.

26. **(New)** The process of claim 25, wherein the anionic inorganic particles are silica-based particles.

27. **(New)** A process for the production of paper which comprises;
(i) providing a suspension containing cellulosic fibres, and optional fillers,
(ii) adding to said suspension drainage and retention aids comprising a cationic organic polymer having an aromatic group and anionic organic particles; and
(iii) forming and dewatering the obtained suspension on a wire, wherein the suspension that is dewatered on the wire has a conductivity of at least 2.0 mS/cm.

28. **(New)** The process of claim 27, wherein the suspension that is dewatered on the wire has a conductivity of at least 5.0 mS/cm.

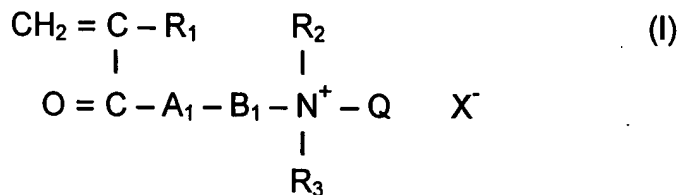
29. **(New)** The process of claim 27, wherein the suspension that is dewatered on the wire has a conductivity of at least 7.5 mS/cm

30. **(New)** The process of claim 27, wherein the anionic organic particles are cross-linked anionic vinyl addition polymers.

31. **(New)** The process of claim 27, wherein the cationic organic polymer is an acrylamide-based polymer.

32. **(New)** The process of claim 27, wherein the aromatic group of the cationic organic polymer is a benzyl group.

33. **(New)** The process of claim 27, wherein the cationic organic polymer comprises in polymerized form a cationic monomer having an aromatic group represented by the general formula (I):



wherein R_1 is H or CH_3 , R_2 and R_3 are each an alkyl group having from 1 to 3 carbon atoms, A_1 is O or NH, B_1 is an alkylene group of from 2 to 4 carbon atoms or a hydroxy propylene group, Q is benzyl, and X^- is an anionic counterion.

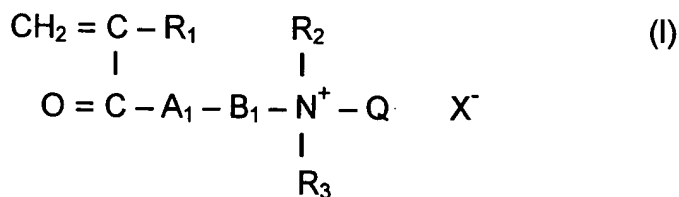
34. **(New)** A process for the production of paper which comprises;

- (i) providing a suspension containing cellulosic fibres, and optional fillers,
- (ii) adding to said suspension drainage and retention aids comprising a cationic organic polymer having an aromatic group and anionic organic particles;
- (iii) recirculating white water and introducing fresh water to form a suspension containing cellulosic fibres, and optional fillers, to be dewatered, wherein the amount of fresh water introduced is less than 10 tons per ton of dry paper produced.

35. **(New)** The process of claim 34, wherein the cationic organic polymer is an acrylamide-based polymer.

36. **(New)** The process of claim 34, wherein the aromatic group of the cationic organic polymer is a benzyl group.

37. **(New)** The process of claim 34, wherein the cationic organic polymer comprises in polymerized form a cationic monomer having an aromatic group represented by the general formula (I):



wherein R_1 is H or CH_3 , R_2 and R_3 are each an alkyl group having from 1 to 3 carbon atoms, A_1 is O or NH, B_1 is an alkylene group of from 2 to 4 carbon atoms or a hydroxy propylene group, Q is benzyl, and X^- is an anionic counterion.

38. **(New)** The process of claim 34, wherein the anionic organic particles are cross-linked anionic vinyl addition polymers.

39. **(New)** A process for the production of paper which comprises;
(i) providing a suspension containing cellulosic fibres, and optional fillers,
(ii) adding to said suspension drainage and retention aids comprising a cationic organic polymer having an aromatic group and a water-soluble anionic vinyl addition polymer; and
(iii) forming and dewatering the obtained suspension on a wire, wherein the suspension that is dewatered on the wire has a conductivity of at least 2 mS/cm.

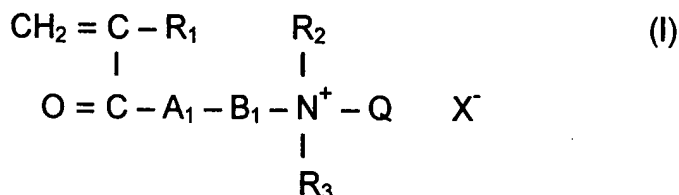
40. **(New)** The process of claim 39, wherein the suspension that is dewatered on the wire has a conductivity of at least 5.0 mS/cm.

41. **(New)** The process of claim 39, wherein the suspension that is dewatered on the wire has a conductivity of at least 7.5 mS/cm.

42. **(New)** The process of claim 39, wherein the water-soluble anionic vinyl addition polymer is an acrylamide-based polymer.

43. **(New)** The process of claim 39, wherein the cationic organic polymer is an acrylamide-based polymer.

44. **(New)** The process of claim 39, wherein the cationic organic polymer comprises in polymerized form a cationic monomer having an aromatic group represented by the general formula (I):



wherein R_1 is H or CH_3 , R_2 and R_3 are each an alkyl group having from 1 to 3 carbon atoms, A_1 is O or NH, B_1 is an alkylene group of from 2 to 4 carbon atoms or a hydroxy propylene group, Q is benzyl, and X^- is an anionic counterion.

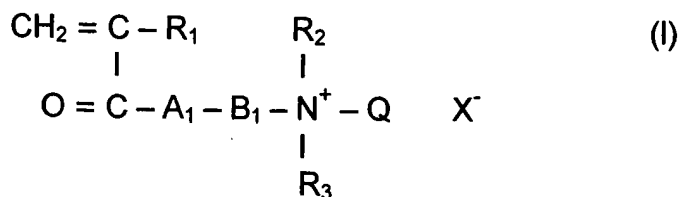
45. **(New)** A process for the production of paper which comprises;

- (i) providing a suspension containing cellulosic fibres, and optional fillers,
- (ii) adding to said suspension drainage and retention aids comprising a cationic organic polymer having an aromatic group and a water-soluble anionic vinyl addition polymer; and
- (iii) recirculating white water and introducing fresh water to form a suspension containing cellulosic fibres, and optional fillers, to be dewatered, wherein the amount of fresh water introduced is less than 10 tons per ton of dry paper.

46. **(New)** The process of claim 45, wherein the water-soluble anionic vinyl addition polymer is an acrylamide-based polymer.

47. **(New)** The process of claim 45, wherein the cationic organic polymer is an acrylamide-based polymer.

48. **(New)** The process of claim 45, wherein the cationic organic polymer comprises in polymerized form a cationic monomer having an aromatic group represented by the general formula (I):



wherein R_1 is H or CH_3 , R_2 and R_3 are each an alkyl group having from 1 to 3 carbon atoms, A_1 is O or NH, B_1 is an alkylene group of from 2 to 4 carbon atoms or a hydroxy propylene group, Q is benzyl, and X^- is an anionic counterion.